## METHODS AND SYSTEMS FOR PROXIMITY SYSTEM TARGET MATERIAL VARIATION EFFECTS REDUCTION

## ABSTRACT OF THE DISCLOSURE

A method of determining a gap defined between an eddy current proximity transducer and a target is provided. The method includes populating a data structure with data points that are relative to a predetermined target property, determining a complex impedance value of the transducer relative to a plurality of selected data structure data points, and determining at least one of a target material property and the gap based on an interpolation of the plurality of selected data structure data points relative to the complex impedance value.